

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
8 January 2004 (08.01.2004)

PCT

(10) International Publication Number
WO 2004/002623 A1

(51) International Patent Classification⁷: **B01J 29/76**, 29/78, C10G 45/12, 45/34, 45/54, 45/64, 47/16, 65/12, 49/08

(74) Agent: **GOLDBACH, Klara**; Grünecker, Kinkeldey, Stockmair & Schwanhäusser, Maximilianstrasse 58, 80538 München (DE).

(21) International Application Number:
PCT/EP2003/006585

(22) International Filing Date: 23 June 2003 (23.06.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
PA 2002 01017 28 June 2002 (28.06.2002) DK

(71) Applicant (for all designated States except US): **HALDOR TOPSOE A/S** [DK/DK]; Nymollevej 55, DK-2800 Lyngby (DK).

(72) Inventors; and
(75) Inventors/Applicants (for US only): **HANSEN, Jens**, Anders [DK/DK]; Sollerødvej 90 A, DK-2840 Holte (DK). **BLOOM, Niels**, Jørgen [DK/DK]; Brunebjerg 24, DK-Hilerød (DK). **BYBERG, Birgitte**, Ravn [DK/DK]; Fuglsangsvej 13, DK-3460 Birkerød (DK). **WARD, John**, W. [US/US]; 19002 Gordon Lane, Yorba Linda, CA 92686-4214 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- with amended claims

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2004/002623 A1

(54) Title: CATALYST COMPRISING ZEOLITE BETA AND ITS USE IN HYDROCARBON CONVERSION PROCESS

(57) Abstract: A hydrocarbon conversion catalyst comprising a modified beta zeolite, an amorphous inorganic oxide and a hydrogenation component wherein the said catalyst support has an NH₃-AI of less than 3.5 and/or an IEC-AI of less than 3.7.

BEST AVAILABLE COPY